Amendments to the Specification:

Replace the paragraph beginning at page 15, line 14 with the following rewritten paragraph:

In accordance with the invention, the circuit arrangement **1** includes an additional line, namely compensation line **5** for compensating for the temperature of connection line **4**. In the present embodiment, the compensation line **5** is realized as a wire, and the connection cable **4** is a coaxial cable. The compensation line **5** extends parallel to the connection cable **4**, and connects to the shield **4a** of the coaxial cable at the end of the coaxial cable adjacent the sensor. Thus, the coaxial cable serves as a low resistance return line of compensation line **5** to the evaluation unit **3**.